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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,201	06/04/2002	Denis Bertin	ATOCM 247	2638
23599	7590	03/18/2004	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			REDDICK, MARIE L	
			ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 03/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/031,201	Applicant(s) BERTIN ET AL.	
	Examiner Judy M. Reddick	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-14,20,21,23,24 and 30-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-14,20,21,23,24 and 30-42 is/are rejected.
- 7) ☒ Claim(s) 6 & 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment to the claims and Counsel's persuasive arguments filed on 12/10/03 are sufficient to remove the rejection of the claims under 35 U.S.C. 103(a) based on Shimo et al.

Claim Objections

2. Claims 6 & 40 are objected to because of the following informalities: In claim 6 @ line3, "monomor" should read "monomer", an obvious typographical error. In claim 40 @ line 1, it is believed that "polypropylene is" should be inserted between "said" and "a", such considered to be and inadvertent omission. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 6, 7, 10, 11, 23, 24, 32, 33 & 34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As far as the Examiner can tell, no support can be found for the recited "instrumental monomor(monomer)" per claim 6(at least page 8, lines 6-13) "dicarboxylic acid" per claims 32 and 33(at least page 8, lines 17, 18 and 20) and "0.86-0.98 g/cm³" per claim 34(page 9, line 17 which states "between 0.86 and 0.98 g/cm³" vs. a "hyphen" which includes both 0.86 and "0.98") and this, as such, without any express guidelines from applicant as to where support might be found, engenders a New Matter Issue.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 4-11, 20, 21, 23, 24, 30, 32-35, 38 and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) Claims 4, 20 & 21 constitute indefinite subject matter as per their dependency, ultimately or directly, from a cancelled claim, viz., claim 3.

B) The recited "polyethylene grafted with polyamide grafts which results from the reaction of (i) a (B1) polyethylene onto which an instrumental monomer" is grafted" per claim 6 constitutes indefinite subject matter as per a) it not being readily ascertainable as to how the reaction product further limits the antecedently recited "polyethylene grafted with polyamide grafts", b) the metes and bounds of "instrumental monomer" engender indeterminacy in scope.

C) The recited "selected from ethylene-maleic anhydride copolymers and ethylene-alkyl(meth)acrylate-maleic anhydride copolymers" per claim 7, "selected from alpha-olefins and dienes" per claims 30 & 38 and "selected from "carboxylic acid, dicarboxylic acid, anhydride and epoxy" per claims 32 & 33 constitute indefinite subject matter as per when materials recited in a claim are so related as to constitute a proper Markush group, they should be recited in the conventional manner, or in the alternative. For example, "wherein R is a material selected from the group consisting of A, B, C and D" is a proper limitation, or alternatively, "wherein R is A, B, C or D" is also proper. See M.P.E.P. § 2173.05(h).

D) The recited "copolymer of propylene and unsaturated monomer" per claim 8 constitutes indefinite subject matter as per it not being known by any rules of chemistry as to how a copolymer can comprise(of) "an unsaturated monomer". A copolymer is a macromolecule produced by the polymerization of two or more monomers. It is suggested that "derived from" be used in lieu of "of" so as to avoid any confusion. It is suggested that applicant note other applicable claims that use this terminology.

E) The recited "in which (B2) is PA-6, PA-11, PA-12, (PA-6/12), of PA-6/6,6" per claim 10 engenders awkwardly expressed and confusing claim language. Further, it is not readily ascertainable as to how the recited "PA-6/6,6"(copolyamide) further limits the antecedently recited "polyamide" (B2).

F) The recited "wherein the (A)/(B) weight ratio per claim 42 constitutes indefinite subject matter as per it not being readily ascertainable as to how the range "3-5" further limits the antecedently recited "between 1 and 5".

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 2, 4-14, 20, 21, 23, 24 and 30-42 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 440,557(*Moriyama et al).

Moriyama et al disclose a resin composition, useful in the formation of single and multilayered structures wherein, said resin composition is defined basically as containing 50 to 99.5 wt.% of (A) a saponified copolymer of ethylene and vinyl acetate(EVOH) governed by a melt flow index(MI @ 210 degrees C under a load of 2160 g) in the range of 0.5 to 100 g/10 min. and preferably 1 to 60 g/10 min., 0.4 to 50 wt.% of (B) a polyolefin resin governed by a melt flow

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index(MI @ 210 degrees C under a load of 2160 g/10 min.) in the range of 0.01 to 100 g/10 min. and includes a copolymer of ethylene-propylene, a crystalline polypropylene, etc., 0.1 to 15 wt.% of(C), for improving the compatibility among the components of the composition, a graft copolymer obtained by a) grafting an ethylenically unsaturated carboxylic acid or derivative onto a polyolefin resin, and then b) reacting the product with a polyamide oligomer or polyamide wherein the ethylenically unsaturated carboxylic acid or derivative thereof includes (meth)acrylic acid, maleic acid, itaconic acid and the corresponding anhydrides or half esters(paragraph bridging pages 3-4) and wherein said polyamide oligomer or polyamide is prepared by addition polymerization of a lactam, polycondensation of an aminocarboxylic acid, polycondensation of a diamine with a dicarboxylic acid, etc.(page 4, lines 5-19) and 0.005 to 5 parts per hundred of (A + B + C) of(D) a hydrotalcite. Moriyama et al further @ page 4, lines 56-60 states, in essence, that while the inventive compositions have a variety of applications such as shaped articles, adhesives, coatings, etc., it is most useful for forming shaped articles such as film, sheets, fibers, etc. See, e.g., the Abstract, page 2, lines 41-54, page 3, lines 1-58, pages 4-6 and the Runs, in particular Run 7 of Moriyama et al which exemplifies a composition containing 85 wt. % of EVOH(E3, MFI=15), 10 wt.% of polypropylene(P1, MFI @ g/10 min =3) and 5 wt.% of graft copolymer(G1), compatibilizer, wherein the contents of polypropylene and graft copolymer(compatibilizer) are such that the ratio of polypropylene/graft copolymer is 2 and the ratio of the MFI of the EVOH to the MFI of polypropylene is 5. To this end, Moriyama et al therefore anticipate the instantly claimed invention with the understanding that one of ordinary skill in the art, following the guidelines of Moriyama @ page 3, lines 21-23 & 29-30, would have readily & fairly envisaged the use, in Run 7, of an EVOH governed by a MFI such that the ratio of the MFI of the EVOH/polypropylene meets the claimed ratio of MFI of EVOH to MFI of polypropylene, i.e., between 8 and 25, in lieu of the EVOH per Run 7, based on their identified equivalent scope.

As to the dependent claims, the limitations appear to be taught by Moriyama et al or at least suggested by Moriyama et al or would have been obvious to one having ordinary skill in the art and with a reasonable expectation of success.

Even if it turns out that the Examiner has somehow missed the boat and the claims are not anticipated, one having ordinary skill in the art would have found it obvious to extrapolate the precisely defined composition, as claimed, from Moriyama et al as per such having been within the purview of the general disclosure of Moriyama et al and with a reasonable expectation of success.

*Let the record show that the first named inventor of EP 440,557 is Moriyama et al and not Honda et al and thus, as is proper, Honda et al has been replaced with Moriyama et al in the header and in the body of the rejection. The prior art rejection is still based on EP 440, 557 and is therefore not considered to engender a rejection based on New Prior art.

Response to Arguments

10. Applicant's arguments filed 12/10/03 have been fully considered but they are not persuasive.

Relative to the 112, 2nd paragraph issues---While Counsel, in a good faith effort, attempted to remedy the 112, 2nd paragraph issues raised in the previous Office Action, some 112, 2nd paragraph issues stand and new 112 1st and 2nd paragraph issues were created and are as clearly set forth supra. As to the rejection under 35 U.S.C. 112, 2nd paragraph relative to the term "compatibilizer" this rejection has been dropped based on counsel's arguments that the meaning given to the term "compatibilizer", within the scope of the instant claims, is a polyethylene or polypropylene carrying polyamide grafts which allows the polypropylene(A) component to be dispersed in the EVOH copolymer(paragraph bridging pages 7 and 8 of the instant specification).

Relative to EP'557(Moriyama et al)---The crux of Counsel's arguments appears to hinge on that in Table 1, EP'557 discloses a composition which contains saponified ethylene-vinyl acetate copolymer, a polyolefin resin and a graft polymer. For the four saponified

ethylene-vinyl acetate copolymers, the melt flow rates (MFR) are 2, 3.5, 15 and 5 g/10 min. For the six polyolefin resins, the melt flow rates (MFR) are 3, 5, 8, 8, 4 and 1.2 g/10 min. Of the 12 compositions, Example 7 in Table 1 exhibits the highest ratio MFR of saponified ethylene-vinyl acetate copolymer to MFR of polyolefin resin, i.e., 5 and therefore there is no suggestion or motivation provided by EP'557 that would lead one of ordinary skill in the art to a composition containing MFR ratio of 8-25. To this end, one of ordinary skill in the art, following the guidelines of Moriyama @ page 3, lines 21-23 & 29-30, would have readily & fairly envisaged the use, in Run 7, of an EVOH governed by a MFI such that the ratio of the MFI of the EVOH/polypropylene meets the claimed ratio of MFI of EVOH to MFI of polypropylene, i.e., between 8 and 25, in lieu of the EVOH per Run 7, based on their identified equivalent scope. It is well established that a reference is available for all it teaches including nonpreferred embodiments as, for instance, is discussed in M.P.E.P. § 2123 which is quoted in its entirety below (underlinings added).

2123 Rejection Over Prior Art's Broad Disclosure Instead of Preferred Embodiments.
PATENTS ARE RELEVANT AS PRIOR ART FOR ALL THEY CONTAIN.

"The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain." In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). See also Celeritas Technologies Ltd. v. Rockwell International Corp., 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fed. Cir. 1998) (The court held that the prior art anticipated the claims even though it taught away from the claimed invention. "The fact that a modem with a single carrier data signal is shown to be less than optimal does not vitiate the fact that it is disclosed.").

NONPREFERRED EMBODIMENTS CONSTITUTE PRIOR ART

Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In re Gurley, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994) (The invention was directed to an epoxy impregnated fiber-reinforced printed circuit material. The applied prior art reference taught a printed circuit material similar to that of the claims but impregnated with polyester-imide resin instead of epoxy. The reference, however, disclosed that epoxy was known for this use, but that epoxy impregnated circuit boards have "relatively acceptable dimensional stability" and "some degree of flexibility," but are inferior to circuit boards impregnated with polyester-imide resins. The court upheld the rejection concluding that applicant's argument that the reference teaches away from using epoxy was insufficient to overcome the rejection since "Gurley asserted no discovery beyond what was known in the art." 27 F.3d at 554, 31 USPQ2d at 1132.).

Conclusion

11. The prior art to Moriyama et al(U.S. 5,177,138, equivalent to EP440,557), Moriyama et al(U.S. 5,214,090), Moriyama et al(U.S. 5,280,065), Moriyama et al(U.S. 5,298,334), Moriyama et al(U.S. 5,310,788), Moriyama et al(U.S. 5,338,502) and Audry(U.S. 5,489,478), made of record and not relied upon, listed on the attached FORM PTO 892 is cited as of interest in teaching resin compositions comprising at least an EVOH copolymer, a polyolefin and a polyamide-grafted

polyolefin. A rejection, based on this prior art, may be made in the future. However, since a valid rejection still exists on this record, a rejection is not being made at this time.

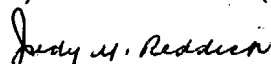
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (571)272-1110. The examiner can normally be reached on Monday-Friday, 6:30 a.m.-3:00 p.m..

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

14. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Judy M. Reddick
Primary Examiner
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